

Ball Apparatus Having Adaptive Rotational Inertia

Abstract

A ball with an inner core that contains movable beads sliding on rods extended radially inside. The springs attached to the beads bias them towards the core while it is at rest. When the ball spins (in flight) or rolls (on greens during putting, for example), the beads located near the axis of rotation are not affected much while those close to the equatorial plane will be spun outwards and hence in turn stress the springs. This increases the moment of inertia of the ball, which then curbs the spin rate. Furthermore, the displaced beads become distributed in a disc-like fashion during the ball's spin. This spinning disc structure possesses gyroscopic stability that helps the ball hold its line of travel much better, compared to other existing balls, and enables it to better tolerate even strong windy conditions.